

PUBLIC HUNTING AND FISHING PLAN

PARKER RIVER NATIONAL WILDLIFE REFUGE
Newburyport, Massachusetts - Region 5

I. PROGRAM RELATION TO REFUGE OBJECTIVES

- A. Objectives. The role of the refuge in the management of wildlife is to provide: (1) Feeding and resting areas for spring and fall concentrations of 30,000 ducks and 6,000 Canada geese for up to 60 days; (2) Nesting habitat for dabbling ducks, Canada geese, and various shorebirds; (3) An opportunity to harvest waterfowl both on and off the refuge; (4) An opportunity for public enjoyment of wildlife and wildlife habitat; and (5) To preserve in as natural a condition as practical, $6\frac{1}{2}$ miles of ocean beach and barrier dunes for people to enjoy.

1. Wildlife

- a. Waterfowl. The primary management objective is to provide a safe resting and feeding area for waterfowl during periods of migration. Secondary objectives are:

- (1) To provide for better distribution of waterfowl hunting opportunity in the Atlantic Flyway;
- (2) To increase waterfowl production in and around the refuge;
- (3) To provide opportunity for public recreational observation of waterfowl in their natural habitat.

The proposed program will create some dispersal of waterfowl and improve hunting adjacent to the refuge on the north and south boundaries. The program will aid in keeping waterfowl moving in an orderly manner south along the Atlantic Flyway. Hunting as proposed will not have a serious adverse effect on waterfowl management objectives.

- b. Other Migratory Birds. The primary objective is to provide sanctuary, resting, and feeding habitat for these species. Secondary objectives are to provide opportunities for public observation.

7/23/70

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- c. Upland Game. The primary objective is provision of sanctuary, breeding, resting, and feeding area to a small population of indigenous upland game. Secondary objectives are to provide opportunities for public observation. The refuge population of cottontail rabbits, and ringnecked pheasants is scattered throughout approximately 1,000 acres of dunes and brushland.
 - d. Big Game. No direct management. The primary objective is to provide habitat for a small population of white-tailed deer. A secondary objective is to provide opportunities for public observation of the species.
2. Fish. No direct management. No fresh water fishing is available. Access to salt water fishing along $6\frac{1}{2}$ miles of ocean beach is available, as is fishing from boats in about 2,622 acres of tidal waters. Primary species sought is the striped bass, but flounder, pollack, and other species are taken from the surf and by boats.
- B. Refuge Role in Atlantic Flyway. The major role of the refuge within the Atlantic Flyway is to provide safe feeding and resting areas for waterfowl during periods of migration and to provide an equitable distribution of hunting opportunity. During the fall migration the objective is to hold the birds for a period of four to six weeks. Food developments on the refuge are programmed to be exhausted or iced-under by the end of November. Primary species benefitted are black duck, Canada goose, and green-winged teal, in that order.

The entire refuge is considered waterfowl habitat. It is estimated that waterfowl use all but the barrier beach-type dune complex. That 908-acre area is considered waterfowl management acreage as a buffer zone. The upland crop units are used primarily by Canada geese. The flooded fresh marsh units are used extensively by black ducks and green-winged teal. Fresh-water marsh pools are used heavily by both ducks and geese. The salt marsh is used universally, but lightly, by both ducks and geese. Use preference by waterfowl is shown for those areas where salt hay has been cut. The tidal mud flats are used mostly by black ducks and are very important feeding areas in late fall, winter and early spring. Geese feed heavily and extensively throughout the marsh on sprouting salt marsh grasses in early spring, on browse-planted uplands in the spring and fall and on open fresh pool areas throughout the year.

C. Summary of Hunting & Fishing Recommendations:

1. Hunting

- a. Pine Island Area (Area A). 1,035 acres, north of Parker River on west bank. This represents an increase of 815 acres in Area A, and provides for the hunting of waterfowl only. Access to the area is permitted by boats launched from any location off the refuge or from designated refuge launching sites. Land access is not permitted. To maintain quality hunting 100 hunters will be the maximum permitted. A permit is required on opening day, Saturdays and holidays. Hunters will be limited to 25 shotshells each per day to reduce the frequency of shooting at waterfowl that are out of range. The area is all waterfowl habitat and comprises 15.6% of the refuge.
- b. Parker River Area (Area B). 290 acres located on the west bank of the refuge, adjacent to the west boundary from Parker River south to Mud Creek and east to Broad Sound. Open to the hunting of waterfowl only. No jump shooting is permitted. Land access is permitted from a refuge parking lot off Marsh Ave. Boat access is not permitted. To maintain quality hunting, there is a limit of 50 hunters and a permit is required on opening day, Saturdays and holidays. Hunters will be limited to 25 shotshells each per day to reduce the frequency of shooting at waterfowl that are out of range. The area is all waterfowl habitat and comprises 4.5% of the refuge.
- c. Nelson's Island Area (Area C). 365 acres located on the west bank area of the refuge, adjacent to the west boundary from Mud Creek south to the southwest boundary, and east to Broad Sound. Open to the hunting of waterfowl only. Land access is permitted from a refuge parking lot off Stackyard Road. Boat access is not permitted. To maintain quality hunting there is a limit of 50 hunters and a permit is required on opening day, Saturdays and holidays. Hunters will be limited to 25 shotshells each per day to reduce the frequency of shooting at waterfowl that are out of range. The area is all waterfowl habitat and comprises 5.7% of the refuge.
- d. Youth Waterfowl Training Area (Area D). 210 acres, located on the central portion of the refuge, from the west side of the toe of the Main Dike west to Broad Sound, and north from the Knobbs Access Road to sub-headquarters. Hunting is limited to successful applicants of the Youth Waterfowl Training Program on specifically designated Saturdays in late October and early November. Open for waterfowl hunting only. Land access only is

provided by our refuge road on Plum Island with parking in refuge lots 7, 9, 11, and 12. There is a limit of 25 hunters plus their instructors on each Saturday that hunts are conducted. Trainees are limited to 25 shot-shells each per day. The area is all waterfowl habitat and comprises 3.2% of the refuge.

Hunting is permitted on Areas A, B, C, and D in accordance with State and Federal Regulations. Pits may not be dug, but natural vegetation, portable blinds, nets, tarps, or similar forms of concealment are permitted. Cutting of vegetation is prohibited. Decoys or shadows may be used. Dogs must be kept on a leash except while retrieving. Alcoholic beverages are not permitted on the refuge. The

total of the areas open to hunting comprises 29% of the refuge acreage. *as taken from the Declaration of Tab... dated 6-4-71, except Acreage which they believe is not water land and is not open to hunting. It is anticipated to be changed through the winter, the Presidential Declaration.*

2. Fishing

a. Salt Water

(1) Surf. Access to surf-fishing is provided on a 24-hr. basis from May 1 through Oct. 15th. Surf fishing at other times by permit. Striped bass are most popular, followed by flounder, pollack, and cod in that order.

(2) Tidal Waters. Tidal waters within the refuge are open to year-round boating. This use has not seriously adversely affected waterfowl management programs.

b. Fresh Water. No fresh water fishing available.

II. PROGRAM POLICIES AND ADMINISTRATIVE CONTROL.

- A. Pine Island Area (Area A). Open daily during the regular Massachusetts waterfowl season. Open from one hour before until one hour after shooting time. There is one attendant at the main gate during busy days and one or more roving patrols daily. A valid Massachusetts State hunting license and a valid migratory bird hunting stamp is required. There is a limit of 100 hunters. Permits and information sheets with maps are available to hunters. Hunting area is plainly marked by signs. Permits are required on opening day, Saturdays, and holidays. No permits are required on weekdays. Access by boat only from off refuge launching sites and designated refuge launching sites is permitted. Parking for hunters' cars and boat trailers is available in Plum Island Lot #1.
- B. Parker River Area (Area B). Open daily during the regular Massachusetts waterfowl season. Open from one hour before until one hour after shooting time. Spot checks and roving patrols are conducted as required. There is a limit of 50 hunters. A valid Massachusetts State hunting license and a valid migratory bird hunting stamp is required. Permits, information sheets with maps are available to hunters. Hunting area is plainly marked by signs. A no jump shooting regulation is in effect during regular State waterfowl season. Permits are required on opening day, Saturdays and holidays. No permits are required on weekdays. Access by land, off Newbury Neck Road and Marsh Ave. to a refuge parking lot is permitted. No boat access is permitted.
- C. Nelson's Island Area (Area C). Open daily during the regular Massachusetts Waterfowl season. Open from one hour before until one hour after shooting time. Spot checks and roving patrols are conducted as required. There is a limit of 50 hunters. A valid Massachusetts State hunting license and a valid migratory bird hunting stamp is required. Permits, information sheets with maps are available to hunters. Hunting area is plainly marked by signs. Permits are required on opening day, Saturdays and holidays. No permits are required on weekdays. Access is by land off Stackyard Road via Nelson's Island Road to a refuge parking lot. No boat access is permitted.

- D. Youth Waterfowl Training Area (Area D). Open for hunting on selected Saturdays in late October and early November, to successful applicants of the Youth Waterfowl Training Program. Open from one hour before shooting time, until all trainees and instructors have cleared the area. There is one attendant at the main gate on Saturdays of the Youth Waterfowl hunts. Bag checks will be conducted by the attendant for Youth Waterfowl participants. Spot checks of the hunt will be conducted as necessary. Trainees must be 15 through 18 years of age and are required to have a valid Massachusetts State hunting license and when applicable a valid migratory bird hunting stamp. Instructors must be 21 years of age or older and have in their possession during the hunt a valid hunting license from any state and a valid migratory bird hunting stamp. One gun for trainees' use only is permitted per blind. The instructor is not permitted to hunt. The refuge selects the site and erects the blind. The hunt will be limited to 25 trainees each Saturday, with one instructor for each trainee on a reservation-drawing permit system. All Trainees will comply with provisions of the Youth Waterfowl Training Program as regards qualifications and conduct of the hunt. Information sheets and maps are provided for the trainees and their instructors. Land access only, with vehicle parking space, is provided at Plum Island Refuge Lot Nos. 7a, 9, 11, and 12.

Except where further restricted, seasons, shooting hours and bag limits on all areas are in accordance with regular State and Federal laws.

III. PROGRAM DESCRIPTION, PROBLEMS AND SOLUTIONS.

- A. Refuge Ecology. The refuge consists of 4,650 acres, plus 1,753 acres of proclamation area, making a total size of 6,403 acres. The area is primarily tidal salt marsh and barrier beach and is classified 100% waterfowl habitat.

<u>Habitat Units</u>	<u>Acres</u>
Natural salt marsh	2,657
Tidal open water	2,622
Upland	308
Man-made Fresh Marsh	216
Barrier Beach Dunes	600
Total	6,403

- B. Refuge Development. Planned development is 100% complete and operational. No further developments are contemplated, pending drafting of a master plan. Additional developments could involve additional diking to provide more fresh marsh and refinements of facilities for public recreational use.

1. Justification. There is limited public waterfowl hunting opportunity three miles north of the shooting areas on about 300 acres of State-owned natural salt marsh. In addition, about 2.2 miles south of the shooting areas is a small State park of about 70 acres which is usually overcrowded and provides very poor quality pass shooting in the dune area. There is no known area, even in private clubs, that can provide the quality and shooting opportunities for the Youth Waterfowl Training Program. All other opportunities are confined to private land ownerships. Anti-hunting laws in Newbury and Rowley practically eliminate all hunting opportunities except to landowners and their friends. Opening limited areas of the refuge to waterfowl hunting does not conflict with Town ordinances and provides an opportunity for quality hunting to the average hunter. There is a great demand for quality hunting opportunity and a serious shortage in this area of New England.

Area A was open for waterfowl hunting in 1969 on a limited scale and worked very well. Also areas B & C were open in 1969. Area D functioned in 1969 as it is proposed this year, for the Youth Waterfowl Training Hunt. It worked very well in 1969. The increased acreage in Area A (known locally as the "West Bank" area) will produce additional high quality hunting to a greater number of hunters daily over the full season, resulting in much more recreational hunting opportunity for sportsmen of eastern Massachusetts.

The limited numbers of hunters and permit system for peak use days has worked well over the past 3 years and is accepted by the sportsmen. The retention of the limit on the numbers of hunters at 100 for Area A, 50 for Area B, 50 for Area C and 25 for Area D, the Youth Waterfowlers training area as well as the permit requirement for opening day, Saturdays and holidays on Areas A, B, and C was deemed necessary to maintain the three areas as quality waterfowl hunting areas. If the 3 areas were opened with no limits or permits required there would be a substantial loss of quality hunting. Experience has shown that the areas would be relegated to the low quality "shooting" areas such as the two overcrowded, over-hunted state managed areas in the vicinity of the refuge. One is located at the south tip of Plum Island and the other at the Salisbury marshes. Both areas offer low quality hunting on peak use days (opening day, Saturdays, and holidays) because of no management controls.

The 25 shell limit per hunter per day for Areas A, B, C, and D is an effort to insure quality waterfowl hunting by trying to minimize the frequency of "sky busting". The condition of the marshes will be benefitted by this regulation since the rate of "leading" will be greatly reduced. It is realized that strict enforcement of this regulation will not be possible however we feel that the voluntary compliance will be significant. The 25 shell limit is actually the recommendation of many sportsmen and sportsmen's groups who have repeatedly complained about the high frequency of "sky busting" on Areas A, B, and C during the 1968 and 1969 seasons.

2. Public Reaction. Opening Areas A, B, C, and D created some dispersal and improves hunting adjacent to the north and west boundary of the refuge. Hunting in Area D occurs only on selected Saturdays in late October and early November. During these very limited hunts, waterfowl are dispersed some, but experience shows that birds disturbed in Area D settle in Broad Sound or in the salt marshes north and south of the Main Dike area. No real problems are experienced. Response to our previous programs in Areas A, B, C, and D has been one of enthusiasm and very favorable. This is particularly encouraging since this acceptance is from local hunters who in previous years constituted a hard core of resistance to the refuge. The refuge receives much friendly and strong support from this group. Response of the State, particularly in the Division of Fisheries and Game, is one of enthusiastic cooperation in management of the hunts. Audubon response is about neutral.

C. Effect on Primary Waterfowl Habitat.

1. Areas A, B and C. Comprise 25.8% of the refuge and are natural salt marsh. These areas, open to hunting in the fall, have little effect on primary waterfowl habitat, as the fresh marsh and farm fields are heaviest used. They will provide excellent pass shooting and reasonable decoy and jump shooting.
2. Area D. Adjacent to a prime waterfowl area, but only opened on selected Saturdays in late October and early November, as a special training area for Youth Waterfowl Hunters. Comprises 3.2% of the refuge and is all natural salt marsh. Opening this area as proposed should have very little effect on adjacent habitat.

IV. PROGRAM UNITS.

A. Pine Island Area (Area A).

1. Management Objectives. Preservation of a natural salt marsh. Provide quality waterfowl hunting.
2. Operation of Program. Open from one hour before until one hour after shooting time during the Massachusetts waterfowl season. Boat access only from launching sites on and off the refuge. Parking is available in Plum Island Refuge Lot No. 1. Permit required on opening day, Saturdays and holidays. 25 shell limit per hunter per day.
3. Estimated Kill. Average .50 ducks per hunter.
4. Effect of Kill on Refuge Conservation Program. Total kill for season estimated at not over 750 ducks and 150 Canada geese. Very little effect on refuge population.
5. Estimated Public Participation. Area capacity limited to 100 hunters daily. Total hunter use is estimated at 1,500 for the season. Heavy use occurs on opening day, Saturdays and holidays. Moderate use occurs on weekdays. Hunting drops to about zero with freezing of the salt marsh in December.

B. Parker River Area (Area B).

1. Management Objectives. Preservation of a natural salt marsh. Provide quality waterfowl hunting.
2. Operation of Program. Open from one hour before until one hour after shooting time during the Massachusetts migratory bird and upland game seasons. Boat access is not permitted. Access by walk-in only. Parking is available off Newbury Neck Road and Marsh Avenue in a refuge lot. Open to hunting of waterfowl only during the waterfowl hunting season with no jump shooting permitted.
3. Estimated Kill. Average .20 ducks per hunter.
4. Effect of Kill on Refuge Conservation Program. Total kill for season estimated at not over 160 ducks and 50 Canada geese. Very little effect on refuge population.
5. Estimated Public Participation. Area capacity limited to 50 hunters daily. Total hunter use is estimated at 800 for the season. Heavy use occurs on opening day, Saturdays, and holidays. Moderate use occurs on weekdays. Hunting drops to about zero with freezing of the salt marsh in December.

C. Nelson's Island Area (Area C).

1. Management Objectives. Preservation of a natural salt marsh. Provide quality waterfowl hunting.
2. Operation of Program. Open from one hour before until one hour after shooting time during the Massachusetts migratory bird and upland game seasons. Boat access is not permitted. Walk-in access only. Parking is available off Stackyard Road in a refuge lot.
3. Estimated Kill. Average .20 ducks per hunter.
4. Effect of Kill on Refuge Conservation Program. Total kill for season estimated at not over 200 ducks and 50 Canada geese. Very little effect on refuge population.
5. Estimated Public Participation. Area capacity limited to 50 hunters daily. Total hunter use is estimated at 1,000 for the season. Hunting drops to about zero with freezing of the salt marsh in December. Heavy use occurs on opening day, Saturdays and holidays. Moderate use occurs on weekdays.

D. Youth Hunt Area (Area D).

1. Management Objectives. Preservation of a natural salt Marsh. Provide controlled, high-quality limited waterfowl hunting as part of an organized Youth Waterfowl Hunter training program.
2. Operation of Program. Open on selected Saturdays in late October and early November to successful applicants of the Youth Waterfowl Training Program on a reservation permit system basis. Massachusetts waterfowl hunting laws apply. Land access only with parking available at Plum Island Refuge Lot Nos. 7a, 9, 11, 12. Each blind will have one trainee and his instructor. One gun will be permitted per blind for the trainees' use only. Trainees will check in and out of the refuge at the main gate and leave a report of kill.
3. Estimated Kill. Average two ducks and one goose per trainee.
4. Effect of Kill on Refuge Conservation Program. Total kill for the season is estimated at 125 Canada geese and 250 ducks. Very little effect on refuge population.
5. Estimated Public Participation. Area capacity limited to 25 trainees on each Saturday. Total trainee use set at 125 for the season.

V. PHYSICAL PLAN AND EQUIPMENT USE REQUIREMENTS.

A. Physical Facilities.

1. Hunting.

- a. Posting. Replacement posting is required on an annual basis on areas A, B and C. Temporary flagging is used for the Youth Training Area (Area D).
- b. Access Roads. All access roads are adequate but are checked and refurbished as necessary.
- c. Parking Areas. All parking lots are adequate but are checked and refurbished as necessary.
- d. Boat Launching Ramps. Refuge launching ramp is checked and refurbished as necessary.
- e. Checking Stations. Adequate for main gate. Radio equipped vehicle patrols spot check Parker River and Nelson's Island Areas (B & C).

2. Fishing. Existing facilities are adequate.

VI. FUNDS AND MANPOWER REQUIREMENTS.

A. Annual Operating Costs.

1. Manpower Requirements

	<u>Man Years</u>		<u>Cost</u>
a. Mail & Information	0.08	\$	500.00
b. Main Gate (Check Station)	0.19		1,500.00
c. Patrol	1.25		9,700.00
Total	1.52	\$	11,700.00

2. Maintenance and Administration.

a. Maps & Regulations (Printing)	200.00
b. Main Gate (Check Station)	100.00
c. Signs	500.00
d. Vehicles and Boats	1,000.00
e. Parking Areas, Access Roads and Boat Launching Ramp.	<u>2,000.00</u>
Total	\$ 3,800.00
Total Program Costs	15,500.00

VII. PROGRAM DATA.

A. Review of Hunting & Fishing Opportunity on Public Lands Within 50 Miles.

In this coastal area there is room for all fishing enthusiasts. Hunting has become crowded and of low quality due to thickly populated conditions, posting of lands, anti-gunning laws, increasing leisure time and handy transportation. Three State areas provide low-quality upland hunting and two State areas provide very poor quality waterfowl hunting. The available State areas offer poor quality shooting weekdays and are dangerously overcrowded on Saturdays and holidays.

B. Tabular Summaries of Wildlife Usage - Five Years.

1. Waterfowl

	<u>Canada Geese</u>	<u>Peak Nos. Canada Geese</u>	<u>All Ducks</u>	<u>Peak Nos. Ducks</u>
1965	281,535	6,000	1,391,400	16,540
1966	494,685	6,500	1,487,478	14,433
1967	426,564	6,500	1,783,064	16,650
1968	513,940	7,000	1,695,952	14,090
1969	462,010	5,000	2,000,950	16,000

Goose and duck use days have increased steadily. However, only goose peak numbers have increased, while duck peak numbers have fluctuated.

2. Other Migratory Birds Numbers of huntable migratory birds other than waterfowl are relatively limited in their occurrence.

3. Upland Game Upland game on hunting Areas A, B and C (predominantly salt marsh area) is extremely scarce.

c. Tabular Summaries of Take and Kill Data.

Extending the area open to waterfowl hunting will no doubt cause a decrease in total use days. It should cause greater dispersal of waterfowl and encourage them to move on south in orderly migration.

Estimated Kill Data

	<u>Geese</u>	<u>Ducks</u>
1966	95	1,165
1967	236	1,139
1968	173	753
1969	95	837
1970	375	1,110

Submitted by:

Edward L. Moses
Refuge Manager

8-3-70
Date

Reviewed by:

Milton Radway
act'g Regional Supervisor gm

8-7-70
Date

Richard E. Griffith
Regional Director

8-31-70
Date

Approved by:

Buell's memo

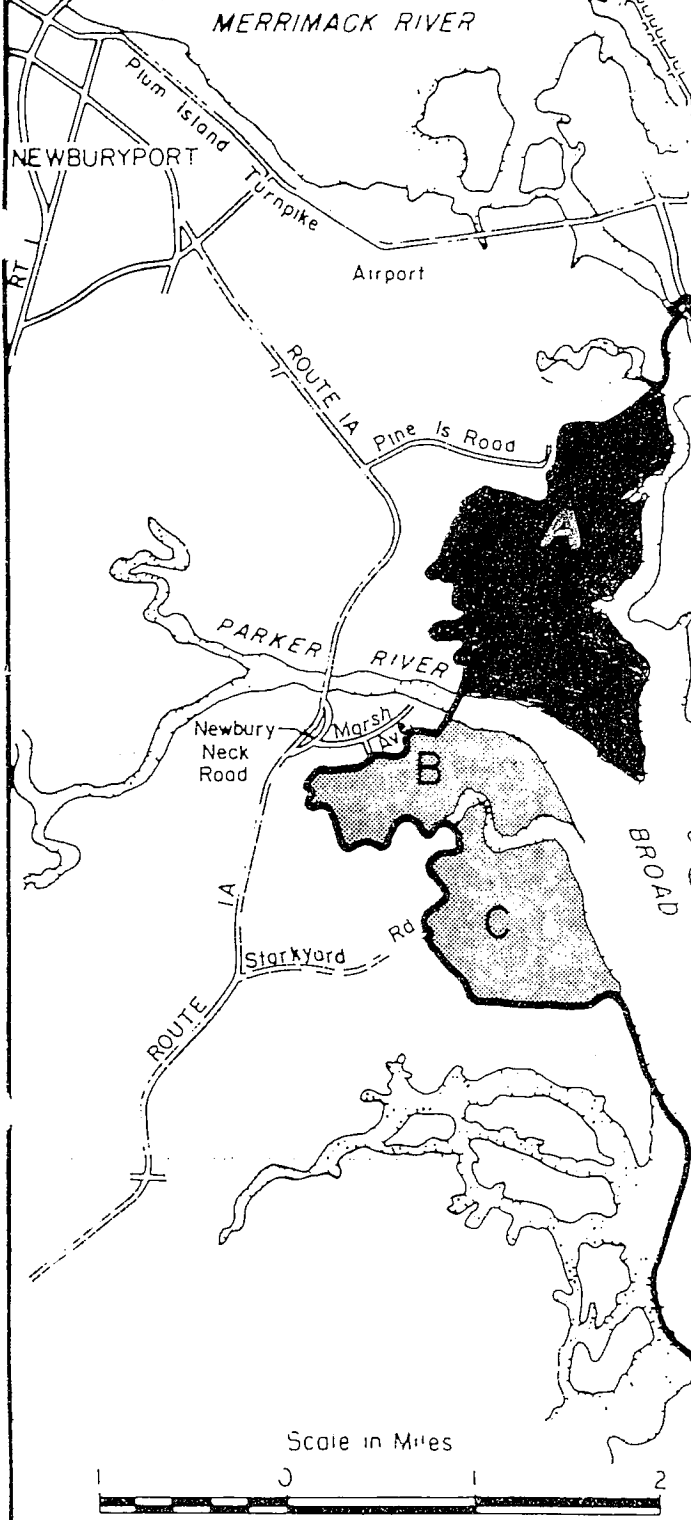
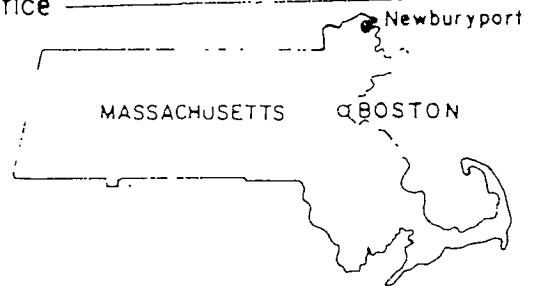
9/18/70
Date

7/23/70

PARKER RIVER NATIONAL WILDLIFE REFUGE



Hunting & Fishing Plan
1970
Refuge
Office



Main Gate (Check Station)

PUBLIC HUNTING AREAS

- A - Pine Island
- B - Parker River
- C - Nelson's Island

YOUNG WATERFOWLERS TRAINING

- D - Youth Hunting Area



Scale in Miles



EFC 660818

U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
PARKER RIVER NATIONAL WILDLIFE REFUGE
HUNTING INFORMATION

Waterfowl hunting only is permitted (goose, duck, merganser, American coot) and only on Areas A, B, and C (map on reverse); in accordance with State and Federal regulations and additional restrictions described below. Sea ducks may be taken on the refuge only when their open season coincides with the open season on regular ducks.

A permit is required to hunt on the refuge, and is good for one season only. These permits may be obtained by writing: Refuge Manager, Parker River National Wildlife Refuge, Northern Boulevard, Plum Island, Newburyport, Massachusetts 01950. Telephone: 617/465-5753, Office hours: 8:00 a.m.-4:30 p.m., Monday-Friday. Refuge hunters will be required to have on their person a valid refuge hunting permit, State Hunting License and Stamp, and Federal Migratory Waterfowl Stamp.

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The number of hunters allowed in each area is limited and areas will be filled on a first come-first served basis. Refuge entrance gate and parking lots will open one hour before legal shooting time. Hunters must report their success or failure on bag report sheets provided at the access points. Pits may not be dug, but natural vegetation, portable blinds, nets, tarps, or similar forms of concealment are permitted. Cutting of vegetation is prohibited. Use of artificial decoys and dogs is encouraged; dogs must be leashed except when retrieving. Permittees are limited to 25 shotshells per day--steel shot is required for all gauges and possession of lead shot is prohibited. Camouflage or drab-colored clothing is required. All-terrain vehicles are prohibited. Sunday hunting is prohibited. It is illegal, with or without a gun, to enter any portion of the refuge other than Areas A, B, or C to retrieve downed waterfowl.

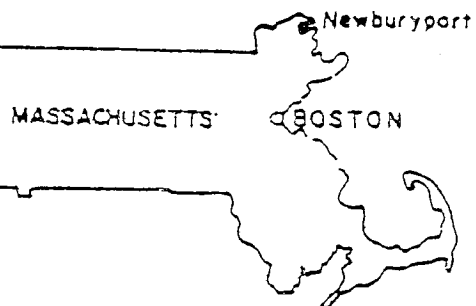
- Area A - Pine Island Area: Limit - 75 permittees. Access by boat only to entire area. Parking lot and boat ramp on Plum Island; boats may be launched from off-refuge also. Loaded guns and shooting (including cripples) are prohibited on the Plum Island and Parker Rivers, including all islands and sand spits therein. Check tide times to avoid being stranded on the marsh by tidal change.
- Area B - Parker River Area: Limit: 25 permittees. Access by 1) boat from refuge (Plum Island) ramp or off-refuge sites, or 2) land from refuge parking lot via Newbury Neck Road and Marsh Avenue. No jump shooting. Hunters must set out a minimum of six (6) waterfowl decoys and hunt within 50 yards of these decoys.
- Area C - Nelson's Island Area: Limit: 50 permittees. Access by land only, from Stackyard Road to refuge parking lot.





PARKER RIVER NATIONAL WILDLIFE REFUGE WATERFOWL HUNTING

Refuge
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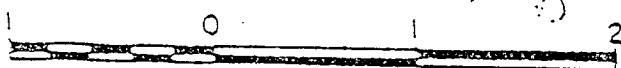
PUBLIC HUNTING AREAS

- A - Pine Island
- B - Parker River
- C - Nelson's Island

- ★ - Parking Areas
- - Boat Launching Ramps
- - Boat Launching Sites
(cartops only)



Scale in Miles



REV 700917